UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

February 9, 1998

SR-6J

Mr. Clifton A. Lake, Esquire
McBride, Baker & Coles
500 West Madison Street
40th Floor
Chicago, Illinois 60661-2511

VIA FACSIMILE AND REGULAR MAIL

Dear Mr. Lake:

This letter is in follow-up to your letter dated December 8, 1997, forwarding on behalf of your client, Fansteel, Inc., a reply to the June 17, 1997, letter from the United States Environmental Protection Agency ("U.S. EPA") regarding Fansteel's willingness to perform the identified response activities.

The June 17, 1997, letter from the U.S. EPA to Fansteel, Inc., indicated that in addition to completing the Engineering Evaluation/Cost Analysis ("EE/CA") for the Vacant Lot property, the following additional actions were necessary at the Vacant Lot Site and the Fansteel property:

a) An EE/CA for the Fansteel property that would identify the nature and extent of the contamination on the Fansteel property, particularly any contamination that may be contributing to the groundwater contamination at the Vacant Lot Site, most notably any potential sources contributing to the contamination of the groundwater with trichloroethene ("TCE"); and,

b) As part of the Fansteel EE/CA, an investigation of Pettibone Creek to determine the nature and extent of any contamination of sediments in Pettibone Creek from the southern-most property line for the Vacant Lot Site to the property boundary of the Great Lakes Naval Training Center.

Your previous letter sent to my attention and dated November 6, 1997, indicated that Fansteel would advise the U.S. EPA of Fansteel's intentions with respect to U.S. EPA's June 17, 1997, letter, and would either perform the EE/CA or finance the cost of an EE/CA performed by U.S. EPA. In the event that Fansteel's decision was to perform the EE/CA, an appropriate Work Plan would be submitted to the U.S. EPA on December 8, 1997. The Outline of a Work Plan submitted by Fansteel does not comply with the U.S. EPA's request, nor does it appear to be what you agreed to submit based upon your letter dated November 6, 1997. In order to satisfy the U.S. EPA's June 17, 1997, notice letter, Fansteel must submit an EE/CA Work Plan. Once the EE/CA work plan has been submitted, we can discuss ways to approach the field work in a phased manner, as outlined in your letter of December 8, 1997. This would allow Fansteel to proceed directly from any initial phase of work to a more detailed and comprehensive scope of

work required by an EE/CA, without any further delays. Therefore, I am providing the following comments on the Outline of the Work Plan, which should be addressed in the text of the EE/CA Work Plan.

GENERAL COMMENTS

1. The EE/CA Work Plan should address how and what background criteria will be used to evaluate contamination after analyzing the samples. The EE/CA Work Plan should address each contaminant level that will be used to characterize a given contaminant as a contaminant of concern. This comment is applicable for soil, sediment, and groundwater samples.

2. The EE/CA Work Plan should include an investigation of the nature and extent of contamination of source areas. This comment is applicable to each affected media (groundwater, sediment, and soil).

3. The EE/CA Work Plan should propose analyzing for the full target analyte list ("TAL"), consisting of the 23 metals plus cyanide, plus tantalum and other metals that were unique to Fansteel's past operations.

4. The EE/CA Work Plan should spell out the analytical methodologies (along with method detection limits) to be utilized for the proposed work, such as Volatile Organic Compounds ("VOCs") analyzed using U.S. EPA Method 8260A, Semi-volatile Organic Compounds ("SVOCs") using U.S. EPA Method 8270B, etc.

SPECIFIC COMMENTS

Proposed Intermediate Investigation - Sheet #1

Objective: ***To determine whether a plume of VOC ["volatile organic compounds"] - contaminated groundwater is migrating from the Fansteel property toward the Vacant Lot Site.***

5. Based upon the review of the Geraghty and Miller past investigations, the shallow groundwater flow is in the direction of Pettibone Creek. In the EE/CA Work Plan please clarify how the proposed determination of near surface groundwater flow will confirm or supplement what has been completed in the past.

6. Fansteel should utilize a direct push technology, such as a geoprobe, to better delineate any groundwater contamination/plume(s) and to track any such contamination back to a source area. Then, based upon the results of that field investigation, the additional six (6) monitoring wells could be optimally placed on the Fansteel property.

7. Only one well is proposed for the south side of the Fansteel site. Since the groundwater flow is in the south and southwest directions, it may be more appropriate to install two (2) wells on the south side of the Fansteel property to determine if there is off-site migration of the plume. Again, Fansteel should utilize a direct push technology, such as a geoprobe, to better delineate any groundwater contamination/plume(s), and then the additional groundwater monitoring wells could be optimally placed.

8. Past history of soil and groundwater sampling conducted on the Fansteel property indicate lead and cadmium contamination. In addition to VOCs, the monitoring well samples should also be analyzed for lead, cadmium, as well as tantalum and other metals that were unique to Fansteel's past operations.

9. The EE/CA Work Plan should specify that, if monitoring wells are to be installed down to 40 feet below ground surface ("bgs"), water samples need to be collected at different intervals, including the first onset of the water table (shallow water table), around 15 feet below ground surface ("bgs") to characterized the presence of contamination.

Proposed Intermediate Investigation - Sheet #2

Objective: **To collect and analyze sediment samples in Pettibone Creek from locations upstream and downstream of the Fansteel outfalls.**

10. Outfall #2 is located at the south end of Pettibone Creek on the Vacant Lot site. Outfall #2 comes from the direction of Fansteel property and is located just north of 22nd Street on the Vacant Lot Site. The National Pollutant Discharge Elimination System ("NPDES") permit for Fansteel indicates this to be a Fansteel outfall.

11. All sediment samples should be analyzed for pesticides and polynuclear aromatic ("PNA") analyses, in addition to metals and polychlorinated biphenyls ("PCBs"). The background section acknowledges the presence of these contaminants in sediments. The sediment analyses should also include tantalum and other metals that were unique to Fansteel's past operations.

12. Collection of three sediment samples south of Outfall #2 may not be possible due to the short distance between the outfall and 22nd Street. Fansteel should consider collecting one sample at Outfall #2, one sample in the Creek south of the outfall, and one sample in the Creek north of the outfall.

13. For Outfall #3, instead of collecting three sediment samples north of Outfall #3, Fansteel should consider collecting one sample at the outfall, one sample in the Creek south of the outfall, and additional samples (three to four?) in the ditch north of the Creek.

14. A composite sample from 0 to 2-foot depth may not provide true characterization of sediment contamination. A zero (0) to 6-inch interval sample and a 6 to 12-inch interval sample may provide more representative characterization.

Proposed Intermediate Investigation - Sheet #3

Objective: **To collect and analyze sediment samples in Pettibone Creek at locations south of the Vacant Lot Site.**

15. To effectively use the analytical results of the samples collected under this EE/CA Work Plan, sediment information at or near Fansteel outfalls should be available. This requires collecting sediment samples at any Fansteel (or other industrial) outfalls south of 22nd Street. The results of these locations may then be compared with other locations of the Creek to determine potential contribution from the outfalls.

Upon receipt of this letter, please contact me to discuss a firm date for submittal of the EE/CA work plan. If you have any questions, I can be reached at (312) 886-1477.

Sincerely,

John J. O'Grady
Remedial Project Manager
Superfund Division

cc: T. Krueger, U.S. EPA Region 5 Office of Regional Counsel